

Substitute for Form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known

Application Number	09/800,687
Filing Date	March 6, 2001
First Named Inventor:	Edward L. Schwartz
Art Unit	2621
Examiner Name	Sherali, Ishrat I.
Attorney Docket Number	74451.P127D6

Sheet 1 of 2

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (If known)				
/S		US-	2001/0003544 A1	06-14-2001	Kajiwara et al.	
		US-	5,303,200	04-12-1994	Elrod et al.	
		US-	5,600,373	02-04-1997	Chui et al.	
		US-	5,999,634	12-07-1999	Abbott et al.	
		US-	6,005,901	12-21-1999	Linz	
		US-	6,031,940	02-29-2000	Chui et al.	
		US-	6,088,395	07-11-2000	Wang et al.	
		US-	6,266,450 B1	07-24-2001	Yip et al.	
		US-	6,275,531 B1	08-14-2001	Li	
		US-	6,332,043 B1	12-18-2001	Ogata	
		US-	6,442,302 B2	08-27-2002	Klassen	
		US-	6,486,981 B1	11-26-2002	Shimura et al.	
		US-	6,492,916 B1	12-10-2002	Schwartz et al.	
		US-	6,549,673 B1	04-15-2003	Ammicht et al.	
		US-	6,606,416 B1	08-12-2003	Yip et al.	
	/S		US-	6,658,159 B1	12-02-2003	Taubman

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				

Examiner
Signature

[Handwritten Signature]

Date Considered
11/07

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SENT FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known

Application Number 09/800,687
 Filing Date 03/06/2001
 First Named Inventor: Edward L. Schwartz
 Art Unit 2621
 Examiner Name Ishrat I. Sherali
 Attorney Docket Number 074451.P127D6

Sheet

1

of

8

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)				
15		US-	3,580,655	5/25/1971	Leith et al.	RECEIVED APR 12 2004 Technology Center 2600
		US-	3,950,103	4/13/1976	Schmidt-Weinmar	
		US-	4,136,954	1/30/1979	Jamieson	
		US-	4,155,097	5/15/1979	Lux	
		US-	4,190,861	2/26/1980	Lux	
		US-	4,223,354	9/16/1980	Noble et al.	
		US-	4,393,456	7/12/1983	Marshall, Jr.	
		US-	4,437,087	3/13/1984	Petr	
		US-	4,569,075	2/4/1986	Nussbaumer	
		US-	4,599,567	7/8/1986	Goupillaud et al.	
		US-	4,652,881	3/24/1987	Lewis	
		US-	4,663,660	5/5/1987	Fedele et al.	
		US-	4,674,125	6/16/1987	Carlson et al.	
		US-	4,701,006	10/20/1987	Perlmutter	
		US-	4,751,742	6/14/1988	Meeker	
		US-	4,760,563	7/26/1988	Beylkin	
		US-	4,785,348	11/15/1988	Fonsalas et al.	
		US-	4,785,349	11/15/1988	Keith et al.	
		US-	4,799,179	1/17/1989	Masson et al.	
		US-	4,805,129	2/14/1989	David	
		US-	4,815,023	3/21/1989	Arbeiter	
		US-	4,817,182	3/28/1989	Adelson et al.	
		US-	4,821,223	4/11/1989	David	
		US-	4,827,336	5/2/1989	Acampora et al.	
		US-	4,829,378	5/9/1989	Le Gall	
		US-	4,837,517	6/6/1989	Barber	
		US-	4,839,889	6/13/1989	Gockler	
		US-	4,858,017	8/15/1989	Torbey	
		US-	4,864,398	9/5/1989	Avis et al.	
		US-	4,868,868	9/19/1989	Yazu et al.	
		US-	4,881,075	11/14/1989	Weng	
		US-	4,894,713	1/16/1990	Delogne et al.	
		US-	4,897,717	1/30/1990	Hamilton et al.	
		US-	4,899,147	2/6/1990	Schiavo et al.	
		US-	4,904,073	2/27/1990	Lawton et al.	
		US-	4,918,524	4/17/1990	Ansari et al.	
		US-	4,922,544	5/1/1990	Stansfield et al.	
		US-	4,929,223	5/29/1990	Walsh	
		US-	4,929,946	5/29/1990	O'Brien et al.	
		US-	4,936,665	6/26/1990	Whitney	
		US-	4,973,961	11/27/1990	Chamzas et al.	
		US-	4,974,187	11/27/1990	Lawton	
	15		US-	4,982,283	1/1/1991	

RECEIVED
 APR 12 2004
 Technology Center 2000

Substitute for Form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known

Application Number	09/800,687
Filing Date	03/06/2001
First Named Inventor:	Edward L. Schwartz
Art Unit	2621
Examiner Name	Ishrat I. Sherali
Attorney Docket Number	074451.P127D6

Sheet 2

of

8

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)				
15		us-	4,985,927	1/15/1991	Norwood et al.	
		us-	4,987,480	1/22/1991	Lippman et al.	
		us-	4,999,705	3/12/1991	Puri	
		us-	5,000,183	3/19/1991	Bonnefous	
		us-	5,001,764	3/19/1991	Wood et al.	
		us-	5,014,134	5/7/1991	Lawton et al.	
		us-	5,018,210	5/21/1991	Merryman et al.	
		us-	5,049,992	9/17/1991	Citta et al.	
		us-	5,049,993	9/17/1991	Le Gall et al.	
		us-	5,068,911	11/26/1991	Resnikoff et al.	
		us-	5,072,308	12/10/1991	Lin et al.	
		us-	5,073,964	12/17/1991	Resnikoff	
		us-	5,081,645	1/14/1992	Resnikoff et al.	
		us-	5,095,447	3/10/1992	Manns et al.	
		us-	5,097,261	3/17/1992	Langdon, Jr. et al.	
		us-	5,097,331	3/17/1992	Chen et al.	
		us-	5,101,280	3/31/1992	Moronaga et al.	
		us-	5,101,446	3/31/1992	Resnikoff et al.	
		us-	5,103,306	4/7/1992	Weiman et al.	
		us-	5,109,451	4/28/1992	Aono et al.	
		us-	5,121,191	6/9/1992	Cassereau et al.	
		us-	5,124,930	6/23/1992	Nicholas et al.	
		us-	5,128,757	7/7/1992	Citta et al.	
		us-	5,128,791	7/7/1992	Le Gall et al.	
		us-	5,148,498	9/15/1992	Resnikoff et al.	
		us-	5,152,953	10/6/1992	Ackermann	
		us-	5,156,943	10/20/1992	Whitney	
		us-	5,173,880	12/22/1992	Duren et al.	
		us-	5,182,645	1/26/1993	Breeuwer et al.	
		us-	5,223,926	6/29/1993	Stone, et al.	
		us-	5,235,434	8/10/1993	Wober	
		us-	5,241,395	8/31/1993	Chen	
		us-	5,262,958	11/16/1993	Chui et al.	
		us-	5,276,525	1/4/1994	Gharavi	
		us-	5,315,670	5/24/1994	Shapiro	
		us-	5,321,776	6/14/1994	Shapiro	
		us-	5,335,016	8/2/1994	Nakagawa	
		us-	5,347,479	9/13/1994	Miyazaki	
		us-	5,349,348	9/20/1994	Anderson et al.	
		us-	5,379,355	1/3/1995	Allen	
		us-	5,381,145	1/10/1995	Allen et al.	
		us-	5,384,869	1/24/1995	Wilkinson et al.	
	15		us-	5,412,741	5/2/1995	Shapiro

RECEIVED
APR 12 2004
Technology Center 2800

RECEIVED
APR 12 2004
Technology Center 2800

Substitute for Form 1449/PTO

Complete if Known

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)

Sheet 3

of

8

Attorney Docket Number

074451.P127D6

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		Number-Kind Code ² (if known)					
LS		US-	5,414,780	5/9/1995	Camahan		
		US-	5,416,604	5/16/1995	Park		
		US-	5,420,891	5/30/1995	Akansu		
		US-	5,453,945	9/26/1995	Tucker et al.		
		US-	5,455,874	10/3/1995	Ormsby et al.		
		US-	5,481,308	1/2/1996	Hartung et al.	RECEIVED	
		US-	5,495,292	2/27/1996	Zhang et al.		
		US-	5,497,435	3/5/1996	Berger	APR 12 2004	
		US-	5,511,151	4/23/1996	Russell et al.		
		US-	5,534,925	7/9/1996	Zhong	Technology Center 2000	
		US-	5,537,493	7/16/1996	Wilkinson		
		US-	5,541,594	7/30/1996	Huang et al.		
		US-	5,442,458	8/15/1995	Rabbani et al.		
		US-	5,546,477	8/13/1996	Knowles et al.		
		US-	5,563,960	10/8/1996	Shapiro		
		US-	5,566,089	10/15/1996	Hoogenboom		
		US-	5,602,589	2/11/1997	Vishwanath et al.		
		US-	5,631,977	5/20/1997	Koshi		
		US-	5,638,498	6/10/1997	Tyler et al.		
		US-	5,657,085	8/12/1997	Katto		
		US-	5,701,367	12/23/1997	Koshi et al.		
		US-	5,717,789	2/10/1998	Anderson, et al.		
		US-	5,754,793	5/19/1998	Eom et al.		
		US-	5,808,683	9/15/1998	Tong et al.		
		US-	5,809,176	9/15/1998	Yajima		
		US-	5,850,482	12/15/1998	Meany et al.		
		US-	5,867,602	2/2/1999	Zandi et al.		
		US-	5,880,856	3/9/1999	Ferriere		
		US-	5,966,465	10/12/1999	Keith et al.		
		US-	6,020,975	2/1/2000	Chen et al.		
		US-	6,026,198	2/15/2000	Okada		
		US-	6,088,062	7/11/2000	Kanou et al.		
		US-	6,101,279	8/8/2000	Nguyen et al.		
		US-	6,118,902	9/12/2000	Knowles		
		US-	6,121,970	9/19/2000	Guedalia		
		US-	6,128,413	10/3/2000	Benamara		
		US-	6,160,846	12/12/2000	Chiang		
		US-	6,201,897 B1	3/13/2001	Nixon		
		US-	6,229,929 B1	5/8/2001	Lynch et al.		
		US-	6,236,765 B1	5/22/2001	Archarya		
		US-	6,237,010 B1	5/22/2001	Hui et al.		
	LS		US-	6,263,109 B1	7/17/2001	Ordentlich et al.	
			US-	6,263,120 B1	7/17/2001	Matsuoka	

RECEIVED

APR 12 2004

Technology Center 2800

Complete if Known

(use as many sheets as necessary)

Sheet 4

of

8

Attorney Docket Number	074451.P127D6
------------------------	---------------

[illegible]

Examiner
Signature

Date Considered

4/04

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Based on Form PTO/SB/08B (08-03) as modified by BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP on 09/10/03.

Substitute for Form 1449/PTO

Complete if Known

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 5

of

8

Attorney Docket Number 074451.P127D6

Application Number 09/800,687
 Filing Date 03/06/2001
 First Named Inventor: Edward L. Schwartz
 Art Unit 2621
 Examiner Name Ishrat I. Sherali

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T*
		Country Code ³	Number ⁴ Kind Code ⁵ (if known)				
15		EPO	0510933 A1	10/28/1992	Canon Kabushiki Kaisha		
		EPO	0593013 A2	4/20/1994	Kabushiki Kaisha Toshiba		
		EPO	0611051 A1	8/17/1994	Canon Kabushiki Kaisha		
		EPO	0622741 A2	11/2/1994	Klics, Ltd.		
		EPO	0967556 A2	12/29/1999	Hewlett-Packard Co.		
		EPO	1035511 A2	9/13/2000	Canon Kabushiki Kaisha		
		EPO	1164781 A1	12/19/2001	Matsushita Electric Ind. Co., Ltd		
		EPO	701375 A2	3/13/1996	Xerox Corporation		
		JP	06-245077	9/2/1994	Nec Corp.		
		JP	406038193 A	7/17/1992	Casio Computer Co. Ltd.		
		JP	6-350989	12/22/1994	Fuji Photo Film Co. Ltd.		
		JP	7-79350	3/20/1995	Fuji Photo Film Co. Ltd.		
		PCT WO	00/49571	8/24/2000	Digital Accelerator Corp.		
		PCT WO	01/16764 A1	3/8/2001	Rtimage Inc.		
		PCT WO	88/10049	12/15/1988	Eastman Kodak Co.		
		PCT WO	91/03902	3/21/1991	Aware, Inc.		
		PCT WO	91/18361	11/28/1991	Yale University		
		PCT WO	93/10634	5/27/1993	General Electric Co.		
		PCT WO	94/17492	8/4/1994	David Sarnoff Research Ctr., Inc.		
		PCT WO	94/23385	10/13/1994	Lewis, Adrian		
		PCT WO	95/19683	7/20/1995	Houston Advanced Research Ctr.		
		PCT WO	96/09718	3/28/1996	Houston Advanced Research Ctr.		
		UK GB	2 211 691 A	7/5/1989	Hitachi Ltd.		
		UK GB	2 284 121 A	5/24/1995	State of Israel- Ministry of Defence		
		UK GB	2 285 374 A	7/5/1995	Ricoh Company Ltd.		
		UK GB	2 293 733 A	4/3/1996	Ricoh Company Ltd.		
		UK GB	2 293 734 A	4/3/1996	Ricoh Company Ltd.		
		UK GB	2 303 030 A	2/5/1997	Ricoh Company Ltd.		
		UK GB	2 303 031 A	2/5/1997	Ricoh Company Ltd.		
		UK GB	2 341 035 A	3/1/2000	Ricoh Company Ltd.		

RECEIVED

APR 12 2004

Technology Center 2600

Examiner Signature

Date Considered

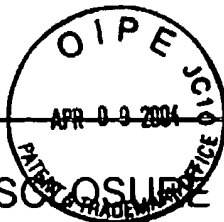
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. ⁶Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SENT FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Substitute for Form 1449/PTO			Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)			Application Number	09/800,687
			Filing Date	03/06/2001
			First Named Inventor:	Edward L. Schwartz
			Art Unit	2621
			Examiner Name	Ishrat I. Sherali
Sheet 6 of 8			Attorney Docket Number	074451.P127D6
NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²	
IS		ANTONINI, et al., "Image Coding Using Wavelet Transform", <u>IEEE Transactions on Image Processing</u> , Vol 1, No. 2, April 1992, pp. 205-220.		
		BLUMBERG, et al., "Visual Realism and Interactivity for the Internet", IEEE, 1997, pp. 269-273.		
		BOLIEK, et al., "Decoding compression with reversible embedded wavelets (CREW) codestreams", <u>Journal of Electronic Imaging</u> , July 1998, vol. 7 (3), pp. 402-409.		
		BOLIEK, et al., "JPEG 2000 for Efficient Imaging in a Client/Server Environment", <u>Proceeding of the PIE, SPIE, Bellingham, VA, US, Vol. 4472, July 31, 2001, pp. 212-223, XP008010308.</u>		
		BOLIEK, et al., "JPEG 2000 Next Generation Image Compression System", IEEE 0-7803-6297, 45-48		
		CALDERBANK, et al., "Wavelet Transforms That Map Integers to Integers", August 1996.		
		CAREY, et al: "Regularity-Preserving Image Interpolation", <u>IEEE Transactions on Image Processing</u> , Vol. 8., No. 9, September 1999, pgs. 1293-1297, XP002246254.		
		CARRATO, et al: "A Simple Edge-Sensitive Image Interpolation Filter", <u>Proceedings of the International Conference on Image Processing (ICIP) Lausanne, Sept. 16-19, 1996, New York, IEEE, US, vol. 1, pgs. 711-714, XP010202493.</u>		
		CHEN, et al., "Wavelet Pyramid Image Coding with Predictable and Controllable Subjective Picture Quality", <u>IEICE Trans. Fundamentals</u> , Vol. E76-A., No. 9, September 1993, pp. 1458-1468.		
		CHEONG, et al., "Subband Image Coding with Biorthogonal Wavelets", <u>IEICE Trans. Fundamentals</u> , Vol. E75-A., No. 7, July 1992, pp. 871-881.		
		CHRYSAFIS, et al., "An Algorithm for Low Memory Wavelet Image Compression", IEEE 0-7803-5467-2/99, pg. 354-358.		
		CHRYSAFIS, et al., "Line Based Reduced Memory, Wavelet Image Compression," <u>Data Compression Conference, 1998, DCC '98, Proceedings Snowbird, UT, March 1998, pgs. 398-407.</u>		
		CHUI, et al., "Wavelets on a Bounded Interval", <u>Numerical Methods of Approximation Theory</u> , Vol. 9, 1992, pg. 53-75.		
		CROCHIERE, et al., "Digital Coding of Speech in Sub-bands", 1976, American Telephone and Telegraph Company, <u>The Bell System Technical Journal</u> , Vol. 55, No. 8, October 1976, p. 1069-1085.		
		DENK, et al., "Architectures for Lattice Structure Based Orthonormal Discrete Wavelet Transforms", IEEE, 1994, pp. 259-270.		
		DESHPANDE, et al., "HTTP Streaming of JPEG2000 Images", IEEE, 2001, pp.15-19.		
		Dutch Search Report, 133082, 11/26/96.		
		ESTEBAN, et al., "1977 IEEE International Conference on Acoustics, Speech & Signal Processing", "Application of Quadrature Mirror Filters to Split Band Voice Coding Schemes", p. 191-195.		
		French Search Report, FR9511023, 11/26/96.		
		French Search Report, FR9511024, 11/26/96.		
		German Search Report, Dated March 21, 1997, 3 pages.		
IS		GHARAVI, et al., "Proceedings: ICASSP 87", 1987 International Conference on Acoustics, Speech, and Signal Processing, April 6, 7, 8, 9, 1987, Volume 4 of 4, "Application of Quadrature Mirror Filtering to the Coding of Monochrome and Color Images", p. 2384-2387.		



Substitute for Form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known

Application Number	09/800,687
Filing Date	03/06/2001
First Named Inventor:	Edward L. Schwartz
Art Unit	2621
Examiner Name	Ishrat I. Sherali
Attorney Docket Number	074451.P127D6

Technology Center 2600

APR 12 2004

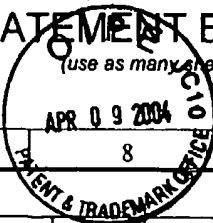
RECEIVED

Sheet 7 of 8

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
IS		GHARAVI, et al., "Sub-band Coding of Digital Images Using Two-Dimensional Quadrature Mirror Filtering", SPIE Vol. 707 Visual Communications and Image Processing, 1986, p. 51-61.	
		GORDON, BENJAMIN M., et al., "A 1.2 mW Video-Rate 2-D Color Subband Decoder," IEEE Journal of Solid-State Circuits, IEEE Inc. New York, Vol. 30, No. 12, Dec. 1, 1995, pgs. 1510-1516.	
		HAUF, et al., "The FlashPix™ Image File Format", The Fourth Color Imaging Conference: Color Science, Systems and Application, 1996, pp. 234-238.	
		HOWARD, et al., "Fast and Efficient Lossless Image Compression", IEEE, 1993, pp. 351-360.	
		Information Technology - JPEG 2000 Image Coding System - Part 1: Core Coding System, ISO/IEC 15444-1, 12/15/2000, pg. 5, 14, 22.	
		International Search Report for Application No.: GB 9518298.6, dated 8. November 1995.	
		JPEG 2000 Part 1 Final Committee Draft Version 1.0, Image Compression Standard described in ISO/IEC 1/SC 29/WG 1 N1646, 16 March 2000.	
		KOMATSU, et al., "Reversible Subband Coding of Images", SPIE Vol. 2501, pp. 676-648.	
		LANGDON, JR., "Sunset: A Hardware-Oriented Algorithm for Lossless Compression of Gray Scale Images", SPIE Vol. 1444, Image Capture, Formatting, and Display, 1991, pp. 272-282.	
		LE GALL, et al., "Sub-band coding of Digital Images Using Symmetric Short Kernal Filters and Arithmetic Coding Techniques", 1988, International Conference on Acoustics, Speech and Signal Processing, pp. 761-764.	
		LEWIS, et al., "Image Compression Using the 2-D Wavelet Transform", IEEE Transactions on Image Processing, Vol. 1, No. 2, April 1992, pp. 244-250.	
		LUX, P., "A Novel Set of Closed Orthogonal Functions for Picture Coding", 1977, pp. 267-274.	
		MARCELLIN, et al., "An Overview of JPEG-2000", Proceedings. DCC 2000 Snowbird, UT, USA, March 28-30, 2000, pp. 523-541, XP010377392.	
		MENG, TERESA H., "A Wireless Portable Video-on-Demand System," VLSI Design, 1998, Proceedings Eleventh International Conference on Chennai, India 407, Jan. 1998, California, pgs. 4-9.	
		OHTA, et al., "Wavelet Picture Coding with Transform Coding Approach", July 1992, No. 7, pp. 776-784.	
		PADMANABHAN, et al., "Feedback-Based Orthogonal Digital Filters", IEEE Transactions on Circuits and Systems, 8/93, No. 8, pp. 512-525.	
		POLLARA et al., "Rate-distortion Efficiency of Subband Coding with Integer Coefficient Filters", 7/1994, pg. 419, Information Theory, 1994, IEEE	
		REEVES, et al: "Multiscale-Based Image Enhancement", Electrical and Computer Engineering, 1997. Engineering Innovation: Voyage of Discovery. IEEE 1997 Canadian Conference on St. Johns, NFLD., Canada May 25-28, 1997, New York, NY. (pgs. 500-503), XP010235053	
		REUSENS, "New Results in Subband/Wavelet Image Coding", 5/1993, pg. 381-385.	
		SAID, et al., "Image Compression Using the Spatial-Orientation Tree", IEEE, 1993, pp. 279-282.	
IS		SAID, et al., "Reversible Image Compression Via Multiresolution representation and Predictive Coding", 8/11/93, pp. 664-674.	

Substitute for Form 1449/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	09/800,687
		Filing Date	03/06/2001
		First Named Inventor:	Edward L. Schwartz
		Art Unit	2621
		Examiner Name	Ishrat I. Sherali
Sheet 8 of 8	Attorney Docket Number	074451.P127D6	



RECEIVED
 APR 12 2004
 Technology Center 2600

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
/S		SHAH, et al., "A Chip Set for Lossless Image Compression", <u>IEEE Journal of Solid-State Circuits</u> , Vol. 26, No. 3, March 1991, pp. 237-244.	
		SHAPIRO, J. M., "An Embedded Hierarchical Image Coder Using Zerotrees of Wavelet Coefficients", <u>IEEE</u> , 1993, pp. 214-223.	
		SHAPIRO, J. M., "Embedded Image Coding Using Zerotrees of Wavelet Coefficients", <u>IEEE Transactions on Signal Processing</u> , 12/93, No. 12, pp. 3445-3462.	
		SMITH, et al., "Exact Reconstruction Techniques for Tree-Structured Subband Coders", <u>IEEE Transactions on Acoustics, Speech, and Signal Processing</u> , Vol ASSP-34, No. 3, June 1986, pg. 434-441.	
		STOFFEL, et al: "A Survey Of Electronic Techniques For Pictorial Image Reproduction," <u>IEEE Transactions On Communications</u> , vol. COM-29, no. 12, December 1981, pp. 1898-1925, XP000560531 IEEE, New York (US).	
		SZU, et al., "Image Wavelet Transforms Implemented by Discrete Wavelet Chips", <u>Optical Engineering</u> , July 1994, Vol. 33, No. 7, pp.2310-2325.	
		VETTERLI, Martin, "Filter Banks Allowing Perfect Reconstruction", <u>Signal Processing 10</u> (1986), pg. 219-244.	
		VETTERLI, Martin, "Multi-Dimensional Sub-band Coding: Some Theory and Algorithms", <u>Signal Processing 6</u> (1984) pg. 97-112.	
		VILLASENOR, et al., "Filter Evaluation and Selection in Wavelet Image Compression", <u>IEEE</u> , 1994, pp. 351-360.	
		WESTERNICK, et al., "Proceedings: ICASSP 87", 1987 International Conference on Acoustics, Speech, and Signal Processing, April 6, 7, 8, 9, 1987, Volume 3 of 4, "Sub-band coding of Images Using Predictive Vector Quantization", p. 1378-1381.	
		WOODS, "Subband Image Coding", 1991, pages 101-108, 163-167, and 180-189.	
		WOODS, et al., "Subband Coding of Images", <u>IEEE Transactions on Acoustics, Speech, and Signal Processing</u> , Vol. 1 ASSP-34, No. 5, October 1986, pp. 1278-1288.	
		WOODS, et al., "Sub-band coding of Images", <u>Proceedings ICASSP 86</u> , Tokyo, Japan, April 1986, p. 1005-1008.	
		WU, et al., "New Compression Paradigms in JPEG2000", <u>Applications of Digital Image Processing XXIII</u> , San Diego, CA USA, July 31-Aug 3, 2000, vol. 4115, pp. 418-429, XP008013391, <u>Proceedings of the DPPE - The International Society for Optical Engineering</u> , 2000, SPIE-Int. Soc. Opt. Eng., USA.	
/S		XIONG, et al., "Joint Optimization of Scalar and Tree-structured Quantization of Wavelet Image Decompositions", 01/11/93, pp. 891-895.	

Examiner Signature		Date Considered	11/04
--------------------	--	-----------------	-------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SENT FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.